AMENDMENT AND PRESENTATION OF CLAIMS

Please replace all prior claims in the present application with the following claims, in which no claims are canceled, withdrawn, currently amended, or newly presented.

1. (Original) A method for retrieving content over a communication network from a web server, the method comprising:

receiving a request from a browser application for the content in the web server;

modifying the request to include information specifying support of a parse and pre-fetch service as to permit handling of the modified request by the web server in absence of an upstream proxy that is communicating with the web server;

forwarding the modified request towards the web server, wherein the upstream proxy, if present, intercepts the modified request and pre-fetches the content from the web server; and

selectively receiving the content from the upstream proxy over the communication network and forwarding the content to the browser application.

2. (Original) A method according to claim 1, wherein the upstream proxy in the modifying step retrieves an initial content from the web server, and parses the retrieved initial content, the pre-fetched content being based on the parsed initial content.

3. (Original) A method according to claim 1, wherein the request in the modifying step conforms with a Hypertext Transfer Protocol (HTTP), the method further comprising:

inserting the treatment information in an optional field of the HTTP.

4. (Original) A method according to claim 1, wherein the step of modifying the request is transparent to the browser application.

5. (Original) A method according to claim 1, further comprising:

receiving another request from another browser application; and

forwarding another modified request based on the other request to another upstream proxy,

wherein said receiving and forwarding steps are concurrently executed with the steps of receiving the request and modifying the request.

6. (Original) A method according to claim 1, further comprising:

communicating with a switching module to receive the request, wherein the switching module including Open Systems Interconnection (OSI) Layer 4 functionality to redirect the request from a network interface.

7. (Original) A method according to claim 1, wherein the content conforms with a markup language that includes Hypertext Markup Language (HTML).

8. (Original) A method according to claim 1, wherein the communication network includes a Very Small Aperture Terminal (VSAT) satellite network, and the upstream proxy in the modifying step resides in an VSAT in communication with the web server.

9. (Original) A computer-readable medium bearing instructions for retrieving content over a communication network from a web server, said instruction, being arranged, upon execution, to cause one or more processors to perform the method of claim 1.

10. (Original) A network apparatus for supporting retrieval of content over a communication network from a web server, the apparatus comprising:

an interface configured to receive a request from a browser application for the content in the web server; and

a proxy being downstream with respect to the web server and configured to modify the request to include information specifying support of a parse and pre-fetch service as to permit handling of the modified request by the web server in absence of an upstream proxy that is communicating with the web server,

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wherein the modified request is forwarded towards the web server, and the remote upstream proxy, if present, intercepts the modified request and pre-fetches the content from the web server, the content from the upstream proxy being received over the communication network and being forwarded to the browser application.

11. (Original) A network apparatus according to claim 10, wherein the upstream proxy retrieves an initial content from the web server, and parses the retrieved initial content, the pre-fetched content being based on the parsed initial content.

12. (Original) A network apparatus according to claim 10, wherein the request conforms with a Hypertext Transfer Protocol (HTTP), the downstream proxy inserting the treatment information in an optional field of the HTTP.

13. (Original) A network apparatus according to claim 10, wherein the request is transparent to the browser application.

14. (Original) A network apparatus according to claim 10, wherein the proxy concurrently communicates with a plurality of upstream proxies including the remote upstream proxy.

15. (Original) A network apparatus according to claim 10, further comprising:

a switching module coupled to the interface, the switching module including Open Systems Interconnection (OSI) Layer 4 functionality to redirect the request from the interface to the downstream proxy.

16. (Original) A network apparatus according to claim 10, wherein the content conforms with a markup language that includes Hypertext Markup Language (HTML).

17. (Original) A network apparatus according to claim 10, wherein the communication network includes a Very Small Aperture Terminal (VSAT) satellite network, and the upstream proxy resides in an VSAT in communication with the web server.

18. (Original) A network apparatus according to claim 10, further comprising:

a local upstream proxy configured to support pre-fetching of content from another web server local to the network apparatus.

19. (Original) A method for retrieving content over a communication network from a web server, the method comprising:

intercepting a request initiated by a browser application for the content, the request being forwarded by a proxy downstream with respect to the web server, wherein the request includes information identifying the downstream proxy;

pre-fetching the content from the web server based on the request; and

forwarding the pre-fetched content to the downstream proxy over the communication network, the downstream proxy forwarding the content to the browser application.

20. (Original) A method according to claim 19, further comprising:

retrieving an initial content from the web server; and

parsing the retrieved initial content,

wherein the pre-fetched content being is on the parsed initial content.

21. (Original) A method according to claim 19, wherein the request in the intercepting step conforms with a Hypertext Transfer Protocol (HTTP), and the treatment information resides in an optional field of the HTTP.

22. (Original) A method according to claim 19, wherein the step of intercepting the request is transparent to the browser application.

23. (Original) A method according to claim 19, wherein the content conforms with a markup language that includes Hypertext Markup Language (HTML).

24. (Original) A method according to claim 19, wherein the communication network includes a Very Small Aperture Terminal (VSAT) satellite network, and the upstream proxy in the modifying step resides in an VSAT in communication with the web server.

25. (Original) A computer-readable medium bearing instructions for retrieving content over a communication network from a web server, said instruction, being arranged, upon execution, to cause one or more processors to perform the method of claim 19.

26. (Original) A network apparatus for retrieving content over a communication network from a web server, the network apparatus comprising:

an interface configured to intercept a request initiated by a browser application for the content, the request being forwarded by a proxy downstream with respect to the web server, wherein the request includes information identifying the downstream proxy; and

an upstream proxy configured to pre-fetch the content from the web server based on the request, wherein the pre-fetched content is forwarded to the downstream proxy over the communication network, the downstream proxy forwarding the content to the browser application.

27. (Original) A network apparatus according to claim 26, wherein the upstream proxy retrieves an initial content from the web server, and parses the retrieved initial content, the pre-fetched content being based on the parsed initial content.

28. (Original) A network apparatus according to claim 26, wherein the request conforms with a Hypertext Transfer Protocol (HTTP), and the treatment information resides in an optional field of the HTTP.

29. (Original) A network apparatus according to claim 26, wherein the parsing of the request and pre-fetching of the content is transparent to the browser application.

30. (Original) A network apparatus according to claim 26, wherein the content conforms with a markup language that includes Hypertext Markup Language (HTML).

31. (Original) A network apparatus according to claim 26, wherein the communication network includes a Very Small Aperture Terminal (VSAT) satellite network.

32. (Original) A system for supporting retrieval of content over a meshed communication network, the system comprising:

a first server configured to receive a request from a browser application for the content resident in the web server, the first server including a downstream proxy configured to modify the request to include information specifying support of a parse and pre-fetch service within an optional header field of the request as to permit handling of the modified request by the web server in absence of an upstream proxy that is communicating with the web server; and

a second server configured as the upstream proxy to intercept the modified request and pre-fetch the content from the web server, the second server forwarding the pre-fetched content over the communication network to the first server.

33. (Original) A system according to claim 32, wherein the upstream proxy retrieves an initial content from the web server, and parses the retrieved initial content, the pre-fetched content being based on the parsed initial content.

34. (Original) A system according to claim 32, further comprising:

a plurality of upstream proxies in simultaneous communication with the downstream proxy of the first server for supporting parsing and pre-fetching of content from a respective plurality of web servers.

35. (Original) A system according to claim 32, wherein the first server includes a switching module having Open Systems Interconnection (OSI) Layer 4 functionality to redirect the request from a network interface to the downstream proxy.

36. (Original) A network device for retrieving content over a communication network from a web server, the device comprising:

means for receiving a request from a browser application for the content in the web server;

means for modifying the request to include information specifying support of a parse and pre-fetch service as to permit handling of the modified request by the web server in absence of an upstream proxy that is communicating with the web server;

means for forwarding the modified request towards the web server, wherein the upstream proxy, if present, intercepts the modified request and pre-fetches the content from the web server; and

means for selectively receiving the content from the upstream proxy over the communication network and forwarding the content to the browser application.